ANNOUNCEMENT

INTERNATIONAL SPRING SCHOOL FOR ENVIRONMENTAL STUDIES 2018

The Wild & Wise Collaborative Learning Program Graduate School of Global Environmental Studies, Kyoto University For students from Kyoto University

The "Top Global University Project" of Kyoto University invites graduate students to receive a short-term scholarship for studying at Kyoto University. The selected students will join the "International Spring School for Environmental Studies 2018 Program" at the Graduate School of Global Environmental Studies (GSGES) with other participants from various countries.

Number of students to be accepted: 6 (six)

Qualification*1: High-achieving students who are registered with a full-time or part-time graduate (doctoral or

master's) program at Kyoto University and have a recommendation from their academic supervisor. They must continue their graduate program after completing the Spring School program. Students must be able to discuss environmental issues in English with other participants from various universities: The University of California, San Diego (U.S.A.), Université Lille (France), Université Caen Normandie (France), Université de Bretagne Occidentale (France), University of Stirling (Scotland), University College Cork (Ireland), University of Modena and Reggio Emilia (Italy), KU Leuven (Belgium), Macquarie University (Australia), Sokoine University of Agriculture (Tanzania). Mahidol University (Thailand), Kasetsart University (Thailand), Bogor Agricultural University (Indonesia), Tsinghua University

(China), and National Taiwan University (Taiwan).

Duration of program in Kyoto: 22 February – 14 March, 2018

What this program offers: The opportunity to join an exclusive program which includes special lectures, field study courses,

and laboratory visits. The detailed contents of the program are given on pages 3 and 4.

Fields of study: Environmental engineering, marine ecology, atmospheric chemistry, agronomy and soil science,

human and environmental interactions and other themes in environmental studies

Scholarship coverage: - Transportation costs during field trip and study tour

- Support of 5,000 yen per day (nearly full coverage of lodging expenses) during field trip

Expenses incurred by individual participants: - Accident insurance

- Expenses for daily meals (lunch and dinner)

- Remaining lodging expenses

Selection schedule & method: By application documents and interview.

20 October: Beginning of online application

7 November: Deadline for submission of application form via website

Mid-November: Notification of screening result, adjustment of interview schedule

Mid-November - early December: Interview Mid-December: Notification of interview result

End of December: Submission of original documents and confirmation letter

End of December: Final notification of acceptance

Documents for application:

- . Application form (via the website upon registration)
- 2. Latest academic transcripts (graduate or undergraduate courses)
- 3. CV
- 4. Recommendation letter from your current academic supervisor
- 5. Certification of your current student status
- 6. English language test score (if any)

Application through the website must be completed <u>by 23:59, 7 November in Japanese time</u>. For applicants who pass the documentation screening and interview examination, all original documents for items 2-6 must be submitted by registered airmail or EMS/DHL/FEDEX by 20 December 2017 (normally DHL, FEDEX takes 2-3 days, EMS 2 days to 1 week, Air mail takes 1-2 weeks to Japan). At this time, we will request **submission** of **confirmation letters** and **passport copies**.

Postal address for original document submission: GSGES Spring School Program

Graduate School of Global Environmental Studies, Kyoto University

Yoshida-honmachi, Sakyo-ku, Kyoto, 606-8501 Japan.

Tel: +81-75-753-9167

E-mail: okamoto.yuki.4x@kyoto-u.ac.jp

Web-site for application: http://www2.ges.kyoto-u.ac.jp/en/news/

*1Applicant must belong to a master program or doctoral program in Kyoto University. Post-doctoral researchers and reseach students are not eligible for this program.

We encourage students with high academic capability and an interest in international academic exchange to apply for this scholarship program.

October 2nd, 2017

Prof. Shinya Funakawa

Dean, Graduate School of Global Environmental Studies, Kyoto University

International Spring School for Environmental Studies 2018

Schedule in 2018

- 22nd February (Thu.) Orientation, full series of lectures, dinner seminar
- 23rd February (Fri.) Kyoto city tour/Seminar (tentative)
- 24th February (Sat.) 26th (Mon.) Field study tour in Shiga*contents 1

(Local natural water usage system around Lake Biwa, Lake Biwa Museum,

Water treatment research site, Sewage treatment facilities, Local confectionary company)

- 27th February (Tue.) 28th (Wed.) Special seminar and experiments in atmospheric chemistry*contents 2
- 1st March (Thu.) 4th (Sun.) Field study tour on Satoyama, Marine Environments and Energy (Ine, Kamiseya, Maizuru, Tsuruga)*contents3
- 5th March (Mon.) Day off
- 6th March (Tue.) Laboratory visit 1 (visiting lab. at GSGES related to your major)*contents4
- 7th March (Wed.) Laboratory visit 2 (visiting lab. at GSGES)*table 1
- 8th March (Thu.) Student exchange program, cultural experiences in Kyoto city
- 9th March (Fri.) Day off
- 10th March (Sat.)-12th (Mon.) Field study tour on Soil and Forest in Wakayama and Mie*contents5
- 13th March (Tue.) Preparation for final seminar
- 14th March (Tue.) Final Seminar and discussion

Contents

1. Field study tour in Shiga (24th – 26nd February)

A three-day tour course will take us around Lake Biwa, the largest lake in Japan, to investigate people's lives and environment. First, we will move to Shiga prefecture and visit a lakeside district named Harie to learn about the natural water utilization system in the local community (active eco-tourism). The next day we will visit the Lake Biwa Museum to learn about natural history, people's lives and environmental conservation measures to rehabilitate the lake, which was once threatened by eutrophication. We will then visit a wastewater treatment plant to learn about state-of the-art technology for wastewater treatment. On the third day, we will visit a famous confectionary factory that has been active in environmental conservation and rural development.

2. Gain expertise about the Atmosphere (27th – 28th February)

We will provide a special course on atmospheric chemistry that includes:

- 1) Air pollution studies
- Kinetic study for NOx and ozone reaction
- Field observation of air quality in Kyoto
- 2) Aerosol formation experiments
- · Secondary organic aerosols from ozonolysis
- · Aerosols from plant emissions

3. Field study tour in Satoyama, Marine Environments and Energy (1st – 4th March)

"Satoyama" is a Japanese term referring to the area comprising hilly terrain and arable flat land. Literally, sato (里) means arable and livable land or local land, and yama (山) means hill or mountain. The Satoyama landscape has evolved through centuries of small scale agricultural and forestry use supporting local people's lives and preserving biodiversity. We will visit an example of Satoyama in the winter, and learn about the landscape, culture, society, and current issues in rural society.

To investigate about the marine environment in the Sea of Japan, we will stay at the Maizuru Fisheries Research Station (MFRS) of Kyoto University in northern Kyoto Prefecture. The research station is well situated for education and research on (1) the life history and ecology of fish, invertebrates and algae, (2) coastal oceanography, (3) systematics of marine fish, (4) terrestrial impacts on productivity and biodiversity in rivers and coastal waters. The course at the Maizuru Fisheries Research Station will cover theories and practical methods to enhance students' knowledge of the marine environment and biodiversity in the Sea of Japan, including:

- 1) Evaluation of marine environment via conductivity, salinity, temperature, chlorophyll, and depth data;
- 2) Collection of benthos and fishes with a beam trawl;
- 3) Identification of species by means of molecular genetic techniques

To deepen our understanding of energy, we will visit a wind power plant to see the actual condition of this renewable energy, and the Atomic Energy Science Museum at the Fukui Nuclear Power Center in Fukui prefecture to learn about the operation of nuclear power plants and accidents at nuclear power plants.

4. Laboratory visit (6th – 7th March)

You will visit a laboratory at GSGES which is related to your current studies on 6th March for the entire day. On 7th March, you can visit other laboratories* (See Table 1) to learn about specific research topics, knowledge and know-how in environmental studies which differs from your major. You can select 2 laboratories to visit (1 laboratory in the morning and the other laboratory in the afternoon).

5. Field study tour on Soil and Forest in Wakayama and Mie (10th – 12th March)

In this tour, we will visit "Ki no Kuni (紀伊国)" which means "country of wood". Lectures will be provided on soils supporting agricultural and natural ecosystems in Japan, especially mountains and forest usage related to Satoyama and livelihood transitions due to societal change. In addition, we will visit a site utilizing woody biomass from local timber as an alternative energy usage source.

Assignment after acceptance

Through this program, we would like all the participants to jointly learn, discuss, and think deeply about "Energy", "Food" and "Linkage among Urban and Rural Areas" for achieving a sustainable society through field studies in the Kansai area.

We kindly request that you investigate conditions related to the keywords above (*Energy, Food, Linkage among Urban and Rural Areas*) in your country in advance to promote productive discussions with other members. In addition, please prepare a short presentation to explain about your current/former studies to show at the Dinner Seminar on 22nd February. The academic backgrounds of the participants are wideranging, so please try to prepare an audience-friendly presentation.

In the series of Atmospheric Chemistry seminars, you will have a presentation (1-2 page of PPT file or PDF file) about air- pollution in your home country/province. Please prepare and make a presentation in English and if you use data from other documents and websites, please indicate the data sources in your presentation.

Important Notice

There may be some subsequent schedule and content changes. We apologize for any inconvenience. We will inform you immediately of major changes.

Table 1 Laboratories available on 7th March 2018.

	Laboratories	Lecturers	Website
1	Global Environmental Policy	Prof. Usami	http://www.envpolicy.ges.kyoto-
			u.ac.jp/Eng_index.html
2	Global Ecological Economics	Assoc. Prof. Mori	http://www2.ges.kyoto-u.ac.jp/en/lab/global-
			ecological-economics/
3	Environmental Education	Assoc. Prof. Singer	http://www2.ges.kyoto-
			u.ac.jp/en/lab/environmental-education/
4	Environmentally-friendly Industries for	Prof. Fujii	http://enfitwww.env.kyoto-u.ac.jp/index-e.html
	Sustainable Development		
5	Environmental Infrastructure Engineering	Prof. Katsumi	http://geotech.gee.kyoto-u.ac.jp/index_e.html
6	Environmental Biotechnology	Prof. Miyashita	http://www2.ges.kyoto-
			u.ac.jp/en/lab/environmental-biotechnology/
7	Environmentally-Friendly Energy	Prof. Abe	http://www2.ges.kyoto-
	Conversion		u.ac.jp/en/lab/environmentally-friendly-energy-
			conversion/
8	Regional Planning	Assoc. Prof. Saizen	http://www.lrp.kais.kyoto-
			u.ac.jp/group/index_E.html
9	Ecosystem Production and Dynamics	Prof. Osawa	http://www2.ges.kyoto-u.ac.jp/en/lab/ecosystem-
			production-and-dynamics/